

ABSTRACT

The present invention relates to an apparatus, which can be made portable, for presenting batch samples of flowable objects for image capturing, more particularly to an automated apparatus that allows for the image analysis of grain or seeds. Objects are deposited into the hopper of the apparatus and, in a continuous stream, are received from the metered bottom opening of the hopper onto a metering belt, the surface of which is textured so as to frictionally-engage the objects. Objects are thereafter deposited, in a high density monolayer, into discrete object presentation areas on an imaging conveyor. The mechanics of the apparatus are co-ordinated to allow for the simultaneous triggering of a radiation device and an image capturing means only at the instant when the object presentation area arrives at a particular location on the imaging conveyor. Image data is captured with respect to every discrete object within an object presentation area, and is analysed by a computer. The speed of operation of the apparatus, in combination with the computer analysis of the image data, allows for the provision of a rapid quality assessment of a large number of objects and batch samples.